

# VGN-K30/K30B/K50B/K70B PCG-K20P/K24FP PCG-K215B/K295HP PCG-K74/K74S/K76P/K76SP

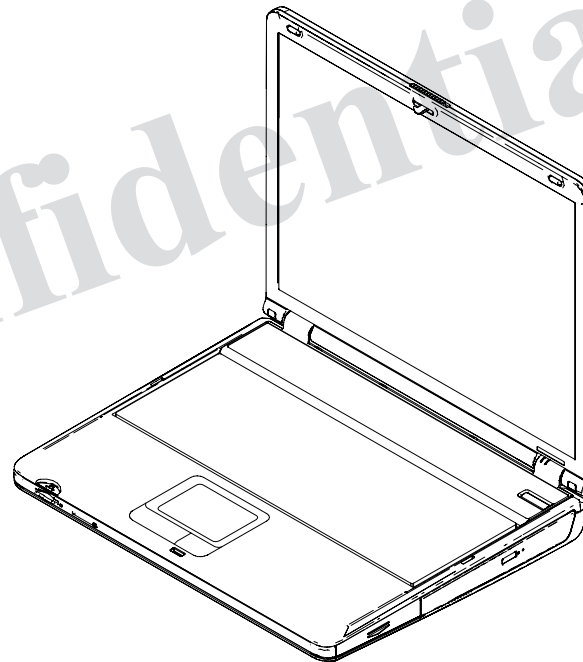
## SERVICE MANUAL

Ver. 8 2005F

### Revision History

Area	Model	Lineup
Japanese	Japanese	VGN-K30 VGN-K30B VGN-K50B VGN-K70B
American	US Canadian	PCG-K20P
	Latin	PCG-K24FP
European	AEP/UK	PCG-K215B PCG-K295HP
Asian/Oceania/ South Africa	International	PCG-K74 PCG-K76P
	Thai	PCG-K74S PCG-K76SP

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- Design and specifications are subject to change without notice.
- 本機の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

PERSONAL COMPUTER

SONY®

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Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

**CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

**CAUTION:** The battery pack used in this device may present a fire or chemical burn hazard if mis-treated. Do not disassemble, heat above 100°C (212°F) or incinerate. Dispose of used battery promptly. Keep away from children.

**CAUTION:** Changing the back up battery.

- Overcharging, short circuiting, reverse charging, multistage or incineration of the cells must be avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.

## Service and Inspection Precautions

### 1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify are as requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

### 2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the  $\triangle$  mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

### 3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

### 4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

### 5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

### 6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270°C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

**ATTENTION AU COMPOSANT AYANT  
RAPPORT  
À LA SÉCURITÉ!**  
**LES COMPOSANTS IDENTIFIÉS PAR UNE  
MARQUE  $\triangle$  SUR LES DIAGRAMMES  
SCHÉMATIQUES ET LA LISTE DES PIÈCES  
SONT CRITIQUES POUR LA SÉCURITÉ DE  
FONCTIONNEMENT. NE REMPLACER CES  
COMPOSANTS QUE PAR DES PIÈCES SONY  
DONT LES NUMÉROS SONT DONNÉS  
DANS CE MANUEL OU DANS LES  
SUPPLÉMENTS PUBLIÉS PAR SONY.**

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VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

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History of the changes is shown as the "Revision History" at the end of this data.

変更履歴は、“Revision History”として、本データ末に記載してあります。

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PCG-K74/K74S/K76P/K76SP (AO)

# CHAPTER 1.

## SPECIFICATIONS

### 1-1. Specifications

	J				AM	
	VGN-K70B	VGN-K50B	VGN-K30B	VGN-K30	PCG-K20P	PCG-K24FP
CPU	P4-2.8GHz	Cel-2.5GHz	Cel-2.5GHz	Cel-2.5GHz	Cel-2.5GHz	P4-2.8GHz
Graphic	RADEON IGP 345M	RADEON IGP 345M	RADEON IGP 345M	RADEON IGP 345M	RADEON IGP 345M	RADEON IGP 345M
LCD	15"XGA (Hight Brightness)	15"XGA (Hight Brightness)	15"XGA (Hight Brightness)	15"XGA (Hight Brightness)	15"XGA (Hight Brightness)	15"XGA (Hight Brightness)
HDD	60GB	60GB	40GB	40GB	30GB	40GB
OPT-DRIVE	DVD+/-RW	DVD+/-RW	DVD+/-RW	DVD+/-RW	CD-RW/DVD-ROM	CD-RW/DVD-ROM
MEMORY	256MB x1	256MB x1	256MB x1	256MB x 1	256MB x 1	256MB x 2
QUANTITY [MAX]	1GB	1GB	1GB	1GB	1GB	1GB
AC adaptor	<del>PCGA-AC19V9</del>	<del>PCGA-AC19V9</del>	<del>PCGA-AC19V9</del>	<del>PCGA-AC19V9</del>	<del>PCGA-AC19V9</del>	<del>PCGA-AC19V9</del>
Battery	PCGA-BP2NY	PCGA-BP2NY	PCGA-BP2NY	PCGA-BP2NY	PCGA-BP2NY	PCGA-BP2NY
internal W-LAN	x	x	x	x	○	○
OS	WinXP Home	WinXP Home	WinXP Home	WinXP Home	WinXP Pro	WinXP Pro

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PCGA-AC19V7

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	EU		AO			
	PCG-K295HP	PCG-K215B	PCG-K76P	PCG-K74	PCG-K76SP	PCG-K74S
CPU	MobileP4-2.8GHz	Cel-2.8GHz	MobileP4-3.06GHz	P4-2.8GHz	MobileP4-3.06GHz	P4-2.8GHz
Graphic	RADEON IGP 345M	RADEON IGP 345M	RADEON 9200(64MB)	RADEON IGP 345M	RADEON 9200(64MB)	RADEON IGP 345M
LCD	15"XGA (Hight Brightness)	15"XGA (Hight Brightness)	15"XGA (Hight Brightness)	15"XGA	15"XGA (Hight Brightness)	15"XGA
HDD	60GB	40GB	60GB	40GB	60GB	40GB
OPT-DRIVE	CD-RW/DVD-ROM	DVD+/-RW	DVD+/-RW	CD-RW/DVD-ROM	DVD+/-RW	CD-RW/DVD-ROM
MEMORY	256MB x 2	256MB x 2	256MB x 2	256MB x 1	256MB x 2	256MB x 1
QUANTITY [MAX]	1GB	1GB	1GB	1GB	1GB	1GB
AC adaptor	PCGA-AC19V7	PCGA-AC19V7	PCGA-AC19V9	PCGA-AC19V7	PCGA-AC19V9	PCGA-AC19V7
Battery	PCGA-BP2NX	PCGA-BP2NX	PCGA-BP2NY	PCGA-BP2NY	PCGA-BP2NY	PCGA-BP2NY
internal W-LAN	○	x	○	x	○	x
OS	WinXP Pro	WinXP Home	WinXP Pro	WinXP Home	WinXP Pro	WinXP Home

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• The trademarks of registered trademarks of above table, refer to page 2.

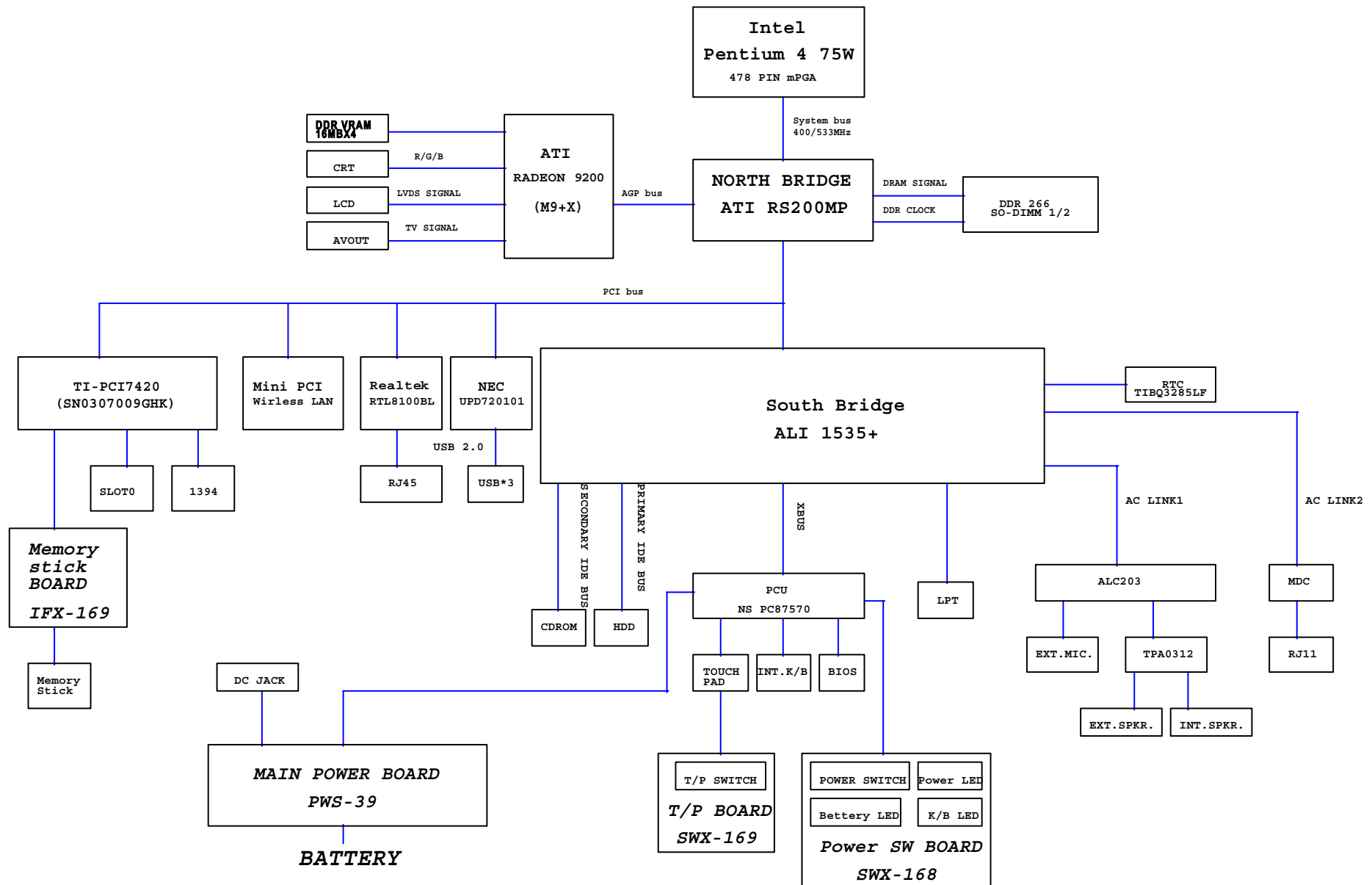
• 本表中の商標・登録商標については、2ページをご参照ください。

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VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

## CHAPTER 2.

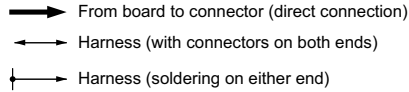
### BLOCK DIAGRAM



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VGN-K30/K30B/K50B/K70B (J)  
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PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

## **FRAME HARNESS DIAGRAM**




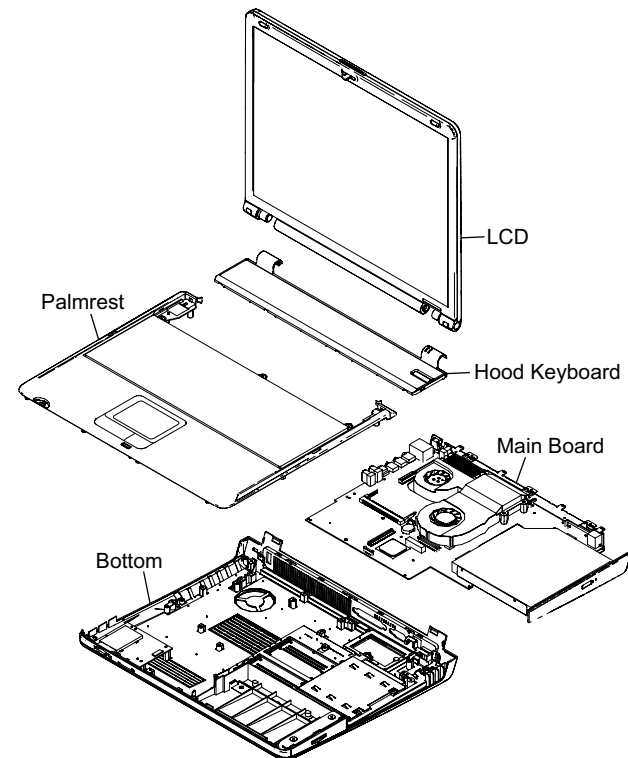
## CHAPTER 4.

### EXPLODED VIEWS AND PARTS LIST

• The parts list is compiled by blocks of a palmrest and bottom etc.  
The sections of the parts list are different depending on the model.  
Please refer to list of contents shown in the below.

• 分解図と部品表は、パームレスト、ボトムなどのブロックごとに分かれています。機種によって部品表のセクションが異なりますので、詳細は右下の一覧表を参照してください。

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<b>Bottom</b>	
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<b>Accessory</b>	
A-1 .....	4-16
<b>DIP Switch</b> .....	4-17  [ADD]






#### NOTE:



- Items marked "\*\*\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- When two or more parts are shown, use the part described first as the main part.
- The parts marked "\$" are the High Value Modules (HVM).
- The parts marked "#" are the parts on which barcode label is attached. For the barcode label, refer to CHAPTER 5.
- The parts marked "&" are the "Customer Replaceable Parts (CRP)" that can be replaced by Field Customer Support. Especially the parts with the "<&" mark require the special attention to use them. Here fore, check first whether the desired part is one of the targetted parts of the Customer Replaceable Parts (CRP), or the non-targetted parts by referring to the exploded view.







#### 【使用上の注意】

- \*印の部品は常備在庫しておりません。
- 図面番号のない部品は供給しません。
- 併記部品の場合、上部記載部品をメイン部品として使用してください。
- 部品名称の前に\$印のついた部品は、High Value Module (HVM) です。
- 商品名称の前に#印のついた部品は、バーコードラベル貼付部品です。バーコードラベルについてはCHAPTER 5を参照してください。
- 部品名称の前に&印のついた部品は、お客様窓口などでも交換可能なCustomer Replaceable Part (CRP) です。特に<&印>のついた部品は、使い分けが必要な部品ですので、分解図でCustomer Replaceable Parts対象部品か、対象外部品かを必ず御確認ください。

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

 印の部品、または 印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。

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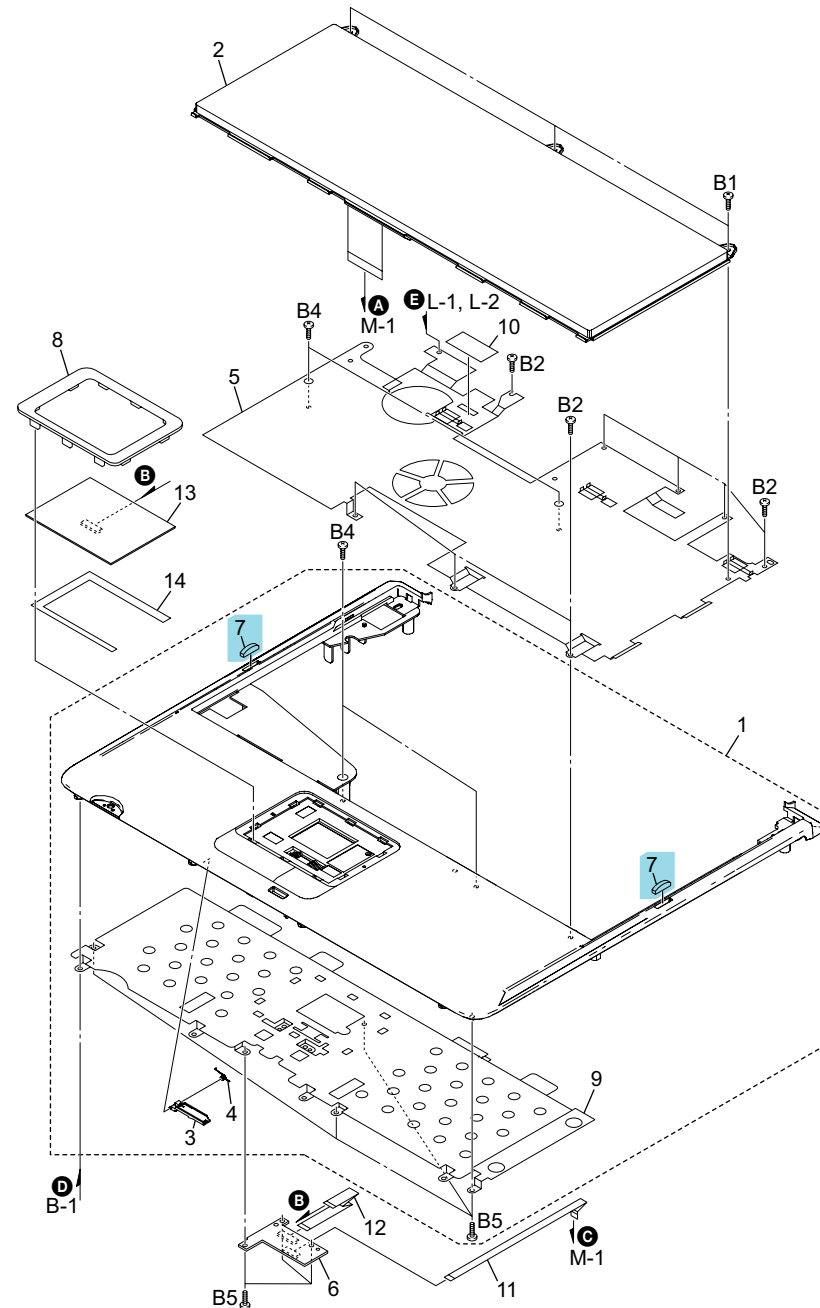
		Palmrest	Main Board	Bottom	Hood Keyboard	LCD	Accessory
J	K70B	P-1	M-1	B-1	H-1	L-1	A-1
	K50B	P-1	M-1	B-1	H-1	L-1	A-1
	K30B	P-1	M-1	B-1	H-1	L-1	A-1
	K30	P-1	M-1	B-1	H-1	L-1	A-1
AM	K20P	P-1	M-1	B-1	H-1	L-1	A-1
EU	K24FP	P-1	M-1	B-1	H-1	L-2	A-1
	K295HP	P-1	M-1	B-1	H-1	L-2	A-1
AO	K215B	P-1	M-1	B-1	H-1	L-2	A-1
	K76P	P-1	M-1	B-1	H-1	L-2	A-1
	K74	P-1	M-1	B-1	H-1	L-3	A-1
	K76SP	P-1	M-1	B-1	H-1	L-2	A-1
	K74S	P-1	M-1	B-1	H-1	L-3	A-1

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VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

## P-1. Palmrest

P-1



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VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)



P-1. Palmrest

Ref. No.	Part No.	Description
1	X-2021-949-1	HOUSING PALMREST ASSY JE22
3	4-681-301-01	LATCH DETECTOR
4	4-676-233-01	SPRING LATCH DETECTOR
* 5	4-681-336-01	BRACKET KEYBOARD
6	A-8068-709-A	\$ COMPLETE PWB SWX-169
7	4-681-295-01	& CUSHION PALMREST
8	4-681-296-01	ESCUTCHEON TOUCHPAD
9	X-2021-524-1	BRACKET TOUCHPAD ASSY
10	2-022-446-01	MYLAR BRACKET K/B
11	1-827-192-11	NE5.1 FFC (PWS-TP)
12	1-829-140-11	FFC (TO T/P)
13	1-796-319-51	PAD, TOUCH
14	2-109-665-01	TAPE TOUCH PAD
B1	4-216-272-01	SCREW (M2), +
B2	4-641-726-12	SCREW (M2), SPECIAL HEAD
B4	4-641-726-41	SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2

			J				AM	EU		AO				
			K70B	K50B	K30B	K30	K20P	K24FP	K295HP	K215B	K76P	K74	K76SP	K74S
Ref. No. Part No.			Description											
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		1-478-597-11					●				●	●		
		1-478-597-31											●	●
		1-478-598-11							●	●				
		1-478-598-22							●	●				
		1-478-598-41							●	●				
		1-478-598-52							●	●				
		1-478-598-71						●						

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- This parts list contains two different types of parts.  
The first type is the parts that are common to all models.  
The other type is the parts that are different depending on each model.
- この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。



# M-1.Main Board

Ref. No.	Part No.	Description
101	A-1055-864-A	\$ COOLING UNIT (S)
102	2-022-437-01	MYLAR COOLING LEFT
103	2-022-438-01	MYLAR COOLING RIGHT
104	2-022-440-01	CUPPER TAPE
105	2-022-439-01	GASKET LAN
106	2-022-441-01	GASKET USB REAR
108	X-4626-731-1	I/O BRACKET ASSY
110	2-022-442-01	CUSHION COOLING BTM
* 111	4-674-030-01	GUIDE DRIVE
* 112	2-159-394-01	BRACKET DRIVE R JE2
* 113	4-674-029-01	BRACKET (DRIVE) (L)
116	2-022-448-01	INSULATOR DRIVER
117	-	KAPTON TAPE
118	-	KAPTON TAPE
119	-	KAPTON TAPE
120	A-8068-707-A	\$ COMPLETE PWB PWS-39
121	1-818-420-11	CONNECTOR, PC CARD
122	4-681-305-01	COVER HOOD
 [DEL]	<del>124 4-681-389-01</del>	<del>PLATE-GND-USB</del>
	127 -	KAPTON TAPE
128	-	KAPTON TAPE
* 129	4-681-361-01	PLATE DC
130	1-761-606-14	CARD, MODEM
131	1-962-643-21	HARNESS 2PIN
132	1-829-139-11	FFC (POWER SWITCH)
133	4-668-785-02	THERMAL SHEET CPU
134	4-670-244-01	SPRING DRIVE R
137	-	KAPTON TAPE
 [ADD]	138 2-176-399-01	SHEET MEMORY
	155 1-756-148-11	SECONDARY, BATTERY LITHIUM
B1	4-216-272-01	SCREW (M2), +
B2	4-641-726-12	SCREW (M2), SPECIAL HEAD
B4	4-641-726-41	SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2
B6	4-645-177-01	SCREW (M1.7X3.5)
B7	4-673-121-01	SCREW PWS
B8	4-651-989-41	SPACER (MBX)
B9	7-622-205-05	NUT M2 TYPE2
B10	4-644-637-91	GRIP, M2 EG
B11	4-635-966-21	SCREW (HEX)
B12	7-621-772-50	SCREW +B 2X10
B16	4-679-805-01	SCREW (B1.7), TAPPING
B17	4-679-805-11	SCREW (B1.7), TAPPING

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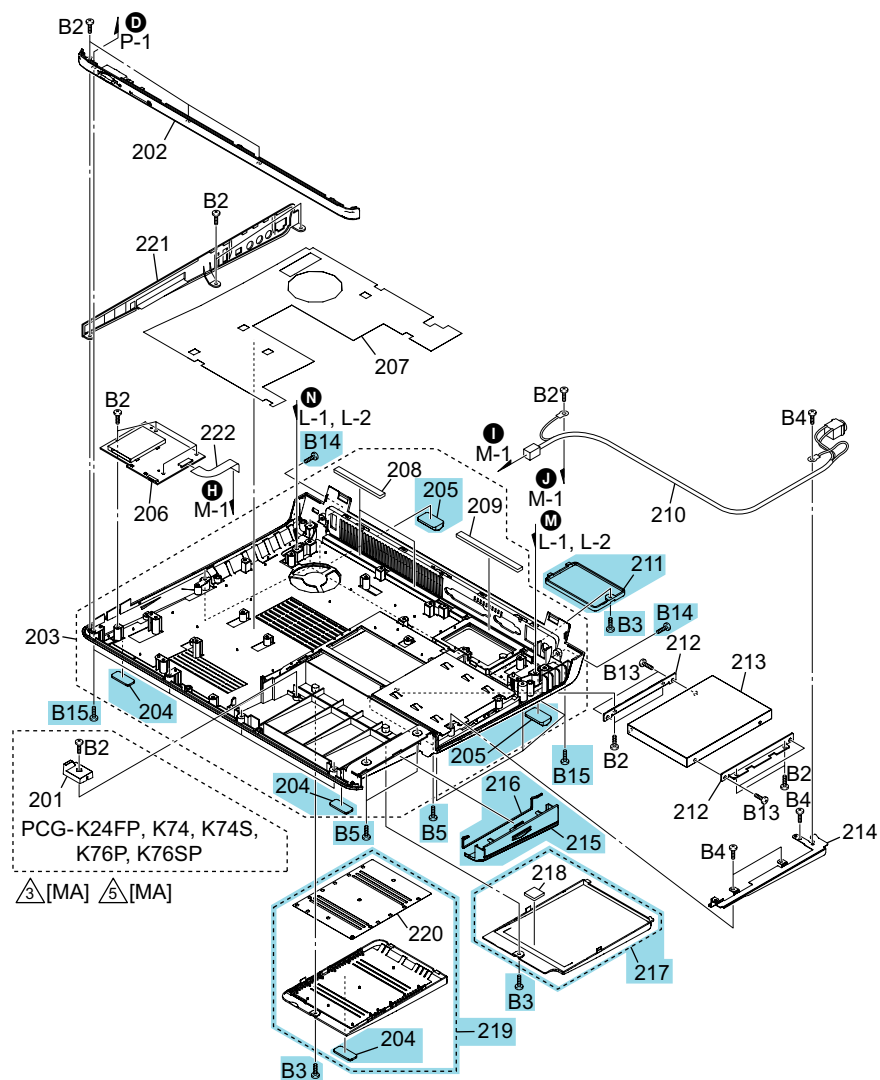
- この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。

- When change the CPU (ref. 209), refer to "Replacing the CPU" in CHAPTER 5.
- CPU (Ref. 209) を交換する際には、CHAPTER 5の「Replacing the CPU」をご参照下さい。

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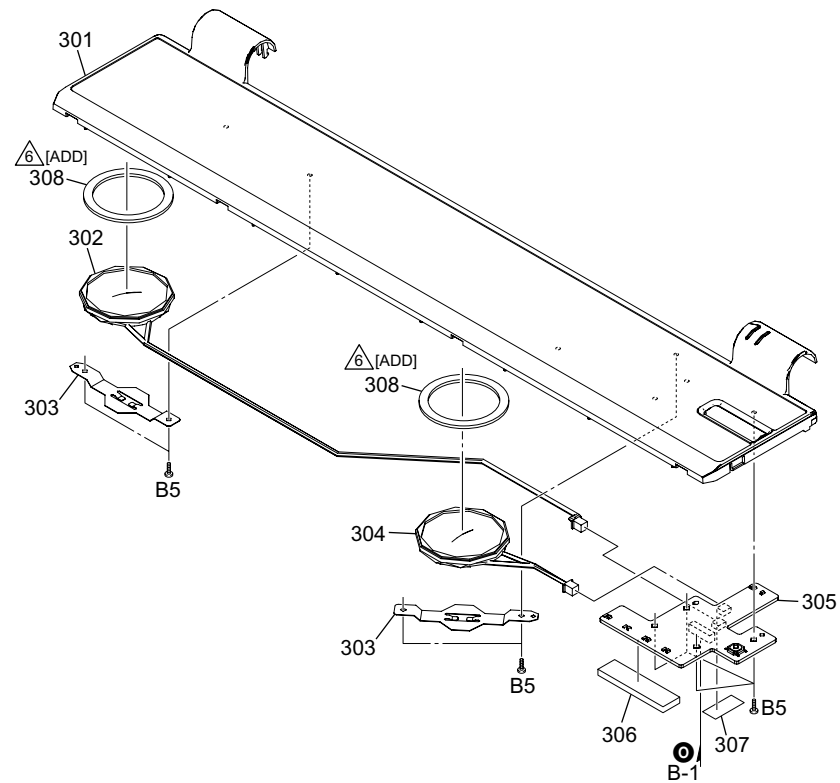
VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

### ***B-1. Bottom***





H-1. Hood Keyboard

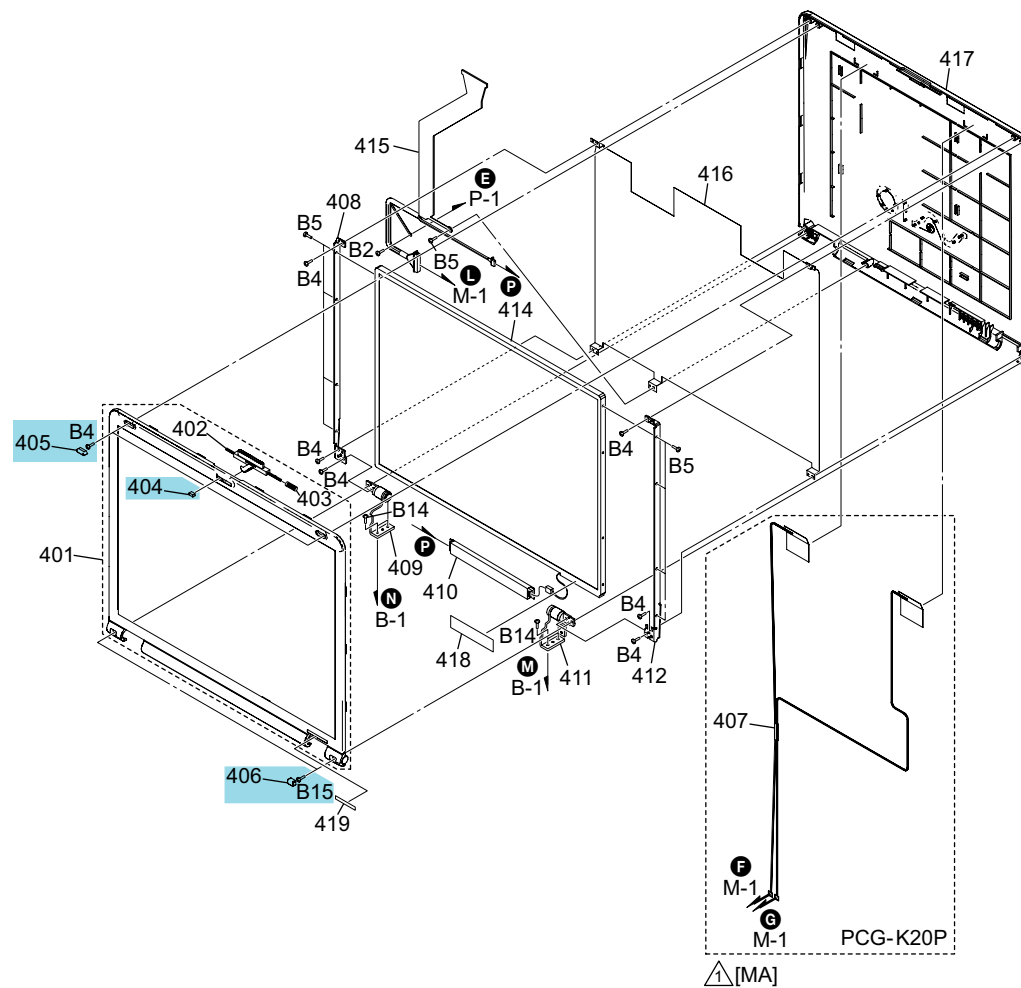


H-1. Hood Keyboard

Ref. No. Part No.		Description
301	X-2021-950-1	HOOD KB ASSY JE22
302	1-825-825-21	SPEAKER (3.2CM)
* 303	4-681-308-01	BRACKET SPK
304	1-825-825-11	SPEAKER (3.2CM)
305	A-8068-706-A \$	COMPLETE PWB PWB SWX-168
306	2-022-447-01	GASKET PW BOARD
307	-	KAPTON TAPE
308	2-318-491-01	SPEAKER CUSHION
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2

△ [ADD]

**L-1. LCD 15-inch XGA (High Brightness)**  
**– Made by AUO –**



**Confidential**

VGN-K30/K30B/K50B/K70B (J)  
 PCG-K20P/K24FP (AM)  
 PCG-K215B/K295HP (EU)  
 PCG-K74/K74S/K76P/K76SP (AO)



## L-1. LCD 15-inch XGA (High Brightness)

### – Made by AUO –

Ref. No.	Part No.	Description
401	X-2021-951-1	BEZEL DISPLAY ASSY
402	4-681-309-01	BUTTON LATCH LCD
403	4-681-352-01	SPRING LATCH LCD
404	4-681-353-01	& CUSHION LATCH
405	4-681-354-01	& CUSHION LCD
406	4-681-355-01	& CUSHION HINGE
* 408	4-681-348-01	BRACKET LCD SPWG L
409	4-681-356-01	HINGE L
410	1-476-317-21	INVERTER UNIT
411	4-681-357-01	HINGE R
* 412	4-681-347-01	BRACKET LCD SPWG R
414	A-8119-699-A	\$ # ASSY LCD 15XGA (AUO) (S)
415	1-962-630-11	HARNESS, LCD (15XGA)
416	4-681-351-01	LCD SHIELDING
417	X-4626-728-1	HOUSING DISPLAY ASSY
418	-	KAPTON TAPE
B2	4-641-726-12	SCREW (M2), SPECIAL HEAD
B4	4-641-726-41	<&> SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2
B14	4-673-655-01	SCREW +B
B15	4-644-637-01	& GRIP, M2 EG

			J				AM
			K70B	K50B	K30B	K30	K20P
Ref. No.	Part No.	Description					
407	1-754-326-11	DUAL BAND ANTENNA (HBLACK)					●
△ [MA]	419	2-067-073-01	●				
		ID LABEL		●			
		2-067-073-11					
		ID LABEL			●		
		2-067-073-21					
		ID LABEL				●	
△ [MA]		2-067-073-31					
		ID LABEL					●
		2-067-584-21					
		ID LABEL (U)					●

△ [MA]

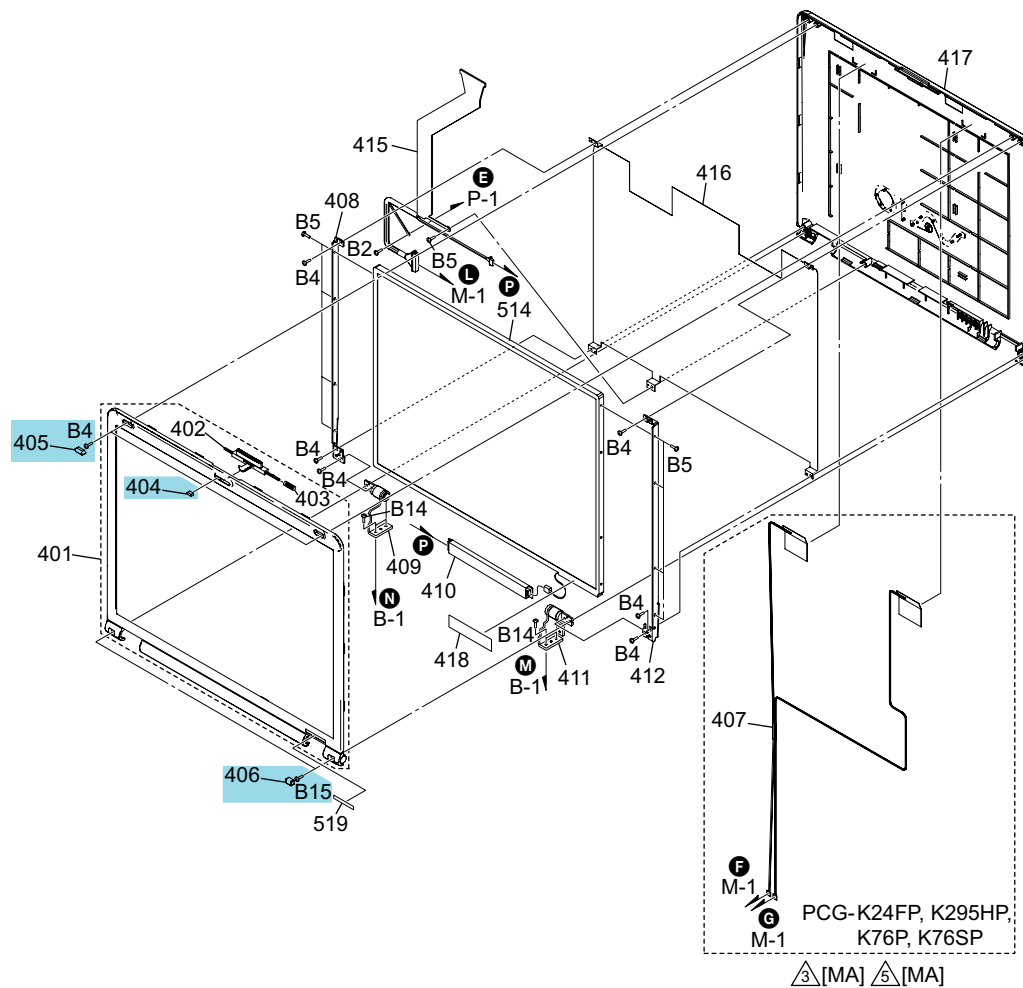
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Confidential

VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

**L-2. LCD 15-inch XGA (High Brightness)**  
**– Made by QDI –**



L-2. LCD 15-inch XGA (High Brightness)  
– Made by QDI –

Ref. No.	Part No.	Description
401	X-2021-951-1	BEZEL DISPLAY ASSY
402	4-681-309-01	BUTTON LATCH LCD
403	4-681-352-01	SPRING LATCH LCD
404	4-681-353-01	& CUSHION LATCH
405	4-681-354-01	& CUSHION LCD
406	4-681-355-01	& CUSHION HINGE
* 408	4-681-348-01	BRACKET LCD SPWG L
409	4-681-356-01	HINGE L
410	1-476-317-21	INVERTER UNIT
411	4-681-357-01	HINGE R
* 412	4-681-347-01	BRACKET LCD SPWG R
415	1-962-630-11	HARNESS, LCD (15XGA)
416	4-681-351-01	LCD SHIELDING
417	X-4626-728-1	HOUSING DISPLAY ASSY
418	-	KAPTON TAPE
514	A-8119-617-A \$ #	ASSY LCD 15XGA (QDI) (S)
B2	4-641-726-12	SCREW (M2), SPECIAL HEAD
B4	4-641-726-41	<&> SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2
B14	4-673-655-01	SCREW +B
B15	4-644-637-01	& GRIP, M2 EG

			AM	EU	AO	
			K24FP	K295HP	K215B	
			K76P	K76SP		
Ref. No. Part No.			Description			
△ [MA]	407	1-754-326-11	DUAL BAND ANTENNA (HBLACK)	●	●	●
△ [MA]	519	2-103-569-01	ID LABEL (L)	●		
△ [MA]		2-067-585-01	ID LABEL (E)		●	
△ [MA]		2-067-585-11	ID LABEL (E)	●		
△ [MA]		2-148-768-01	ID LABEL (GVD)		●	
△ [MA]		2-148-768-21	ID LABEL (GVD)			●
△ [MA]						

△ [MA]

△ [MA]

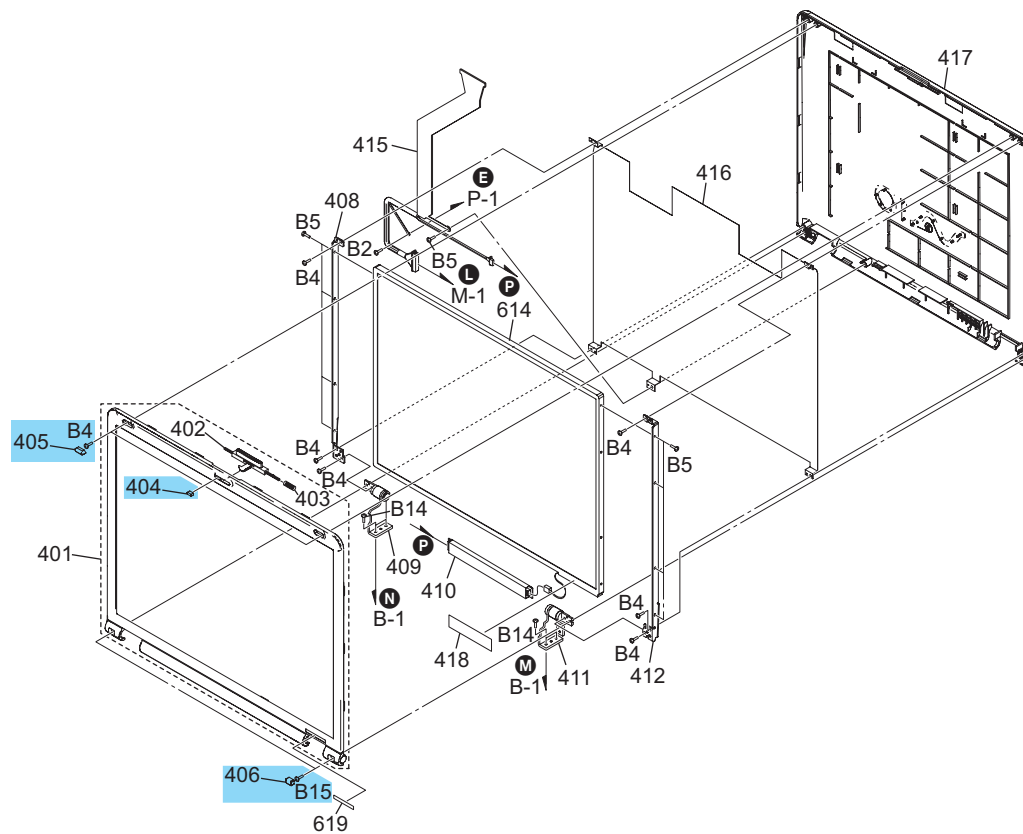
△ [MA]

△ [MA]

△ [MA]

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**L-3. LCD 15-inch XGA**  
**– Made by AU –**



# L-3. LCD 15-inch XGA – Made by AU –

Ref. No.	Part No.	Description
401	X-4626-729-1	BEZEL DISPLAY ASSY
402	4-681-309-01	BUTTON LATCH LCD
403	4-681-352-01	SPRING LATCH LCD
404	4-681-353-01	& CUSHION LATCH
405	4-681-354-01	& CUSHION LCD
406	4-681-355-01	& CUSHION HINGE
* 408	4-681-348-01	BRACKET LCD SPWG L
409	4-681-356-01	HINGE L
410	1-476-317-21	INVERTER UNIT
411	4-681-357-01	HINGE R
* 412	4-681-347-01	BRACKET LCD SPWG R
415	1-962-630-11	HARNESS, LCD (15XGA)
416	4-681-351-01	LCD SHIELDING
417	X-4626-728-1	HOUSING DISPLAY ASSY
418	-	KAPTON TAPE
614	A-8115-791-A \$ #	ASSY LCD 15XGA (AU) (S)
B2	4-641-726-12	SCREW (M2), SPECIAL HEAD
B4	4-641-726-41	<&> SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2
B14	4-673-655-01	SCREW +B
B15	4-644-637-01	& GRIP, M2 EG

			AO	
			K74	K74S
Ref. No.	Part No.	Description		
619	2-148-768-11	ID LABEL (GVD)	●	
	2-148-768-31	ID LABEL (GVD)		●

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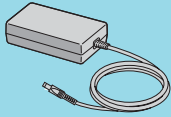


Confidential

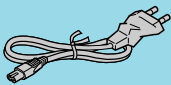
VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

# A-1. Accessories

**1001  
AC Adaptor**



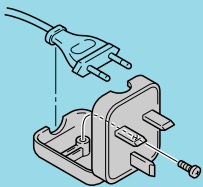
**1007  
Power Cord**



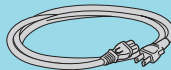
**1002  
Battery**



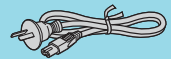
**1008  
Conversion Plug  
3P Adaptor**



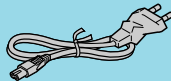
**1003  
Power Cord**



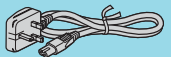
**1004  
Power Cord**



**1005  
Power Cord**



**1006  
AC Power Cord**



			J				AM	EU	AO					
			K70B	K50B	K30B	K30	K20P	K24FP	K295HP	K215B	K76P	K74	K76SP	K74S
Ref. No. Part No. Description														
⚠ [MA]	!	1001	1-478-390-72 \$	&	ADAPTOR, AC	•	•	•	•	•	•	•	•	•
			1-478-037-33 \$	&	ADAPTOR, AC	•	•	•	•	•	•	•	•	•
⚠ [MA]	!	1002	A-8067-763-A	&	BP2NX SNT(J)ASSY(S)	•	•	•	•	•	•	•	•	•
			A-8112-427-A \$	&	BP2NX SNT(U)ASSY (S)	•	•	•	•	•	•	•	•	•
⚠ [MA]	!		A-8120-053-A \$	&	BP-2NY ASSY (S)	•	•	•	•	•	•	•	•	•
		1003	1-790-732-32	&	CORD, POWER	•	•	•	•	•	•	•	•	•
⚠ [MA]	!	1004	1-757-562-21	&	CORD, POWER			•	•					
⚠ [MA]	!	1005	1-555-074-32	&	CORD, POWER									
⚠ [MA]	!	1006	1-575-131-61	&	CORD, POWER					•	•		•	•
⚠ [MA]	!	1007	1-823-935-51	&	CORD, AC POWER						•	•		
⚠ [MA]		1008	1-770-019-12	&	ADAPTOR, CONVERSION PLUG 3P					•	•			
	-		1-816-429-12	&	(UK)...PHONE PLUG (GB)					•	•			
	-		2-050-929-01	&	CURTE, VAIO	•	•	•	•					
⚠ [MA]	-		2-050-393-01	&	QUICK START			•						
⚠ [MA]	-		2-050-903-01	&	QUICK START (LA)			•						
⚠ [MA]	-		2-050-526-01	&	GETTING STARTED BOOKLET					•	•			
⚠ [MA]	-		2-050-521-11	&	(UK)...HW SPECS					•	•			
⚠ [MA]	-		2-050-521-21	&	(German)...HW SPECS					•	•			
⚠ [MA]	-		2-050-521-31	&	(French)...HW SPECS					•	•			
⚠ [MA]	-		2-050-521-41	&	(Italian)...HW SPECS					•	•			
	-		2-048-421-01	&	MANUAL, INSTRUCTION									
⚠ [MA]	-		2-059-978-11	&	MANUAL (XP), INSTRUCTION							•	•	•

• This parts list contains two different types of parts.  
The first type is the parts that are common to all models.  
The other type is the parts that are different depending on each model.

• この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。

△ [MA] △ [MA] △ [MA] △ [MA] △ [MA] △ [MA] △ [MA] △ [MA]

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VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

DIP Switch

- The DIP switch setting is following table.
- DIPスイッチの設定は下の表をご参照ください。

J	VGN-K70B/K50B/K30B/K30	
	<div><div>ON</div><div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div></div>	
AM	PCG-K20P	PCG-K24FP
	<div><div>ON</div><div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div></div>	<div><div>ON</div><div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div></div>
EU	PCG-K295HP/K215B	
	<div><div>ON</div><div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div></div>	
AO	PCG-K74/K74S ⚠[MA]	PCG-K76P/K76SP ⚠[MA]
	<div><div>ON</div><div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div></div>	<div><div>ON</div><div><div><div>1</div><div>2</div><div>3</div><div>4</div></div></div></div>

⚠ [ADD]

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VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

## CHAPTER 5.

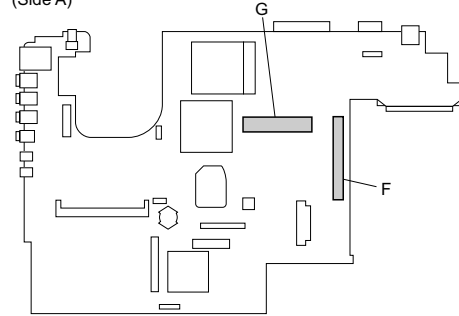
### OTHER

#### 5-1. The Barcode Label

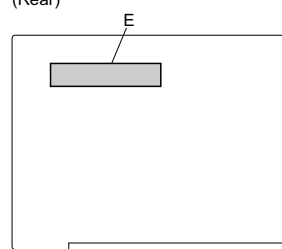
The hatched portion of the barcode is used as the repair data.

バーコードラベルの網掛け部は、修理データとして使用いたします。

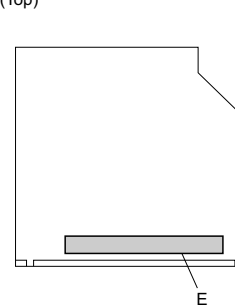
[ MBX-114 Board ]  
(Side A)



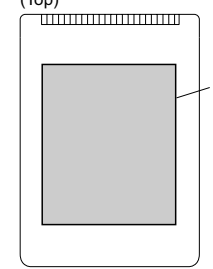
[ LCD 15-inch XGA (High Brightness) (AUO) ]  
(Rear)



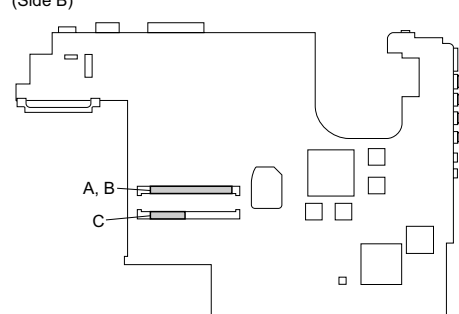
[ DVD+-RW Drive (Made by Pa) ]  
(Top)



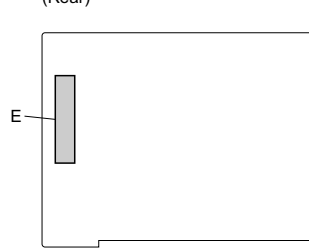
[ HDD ]  
(Top)



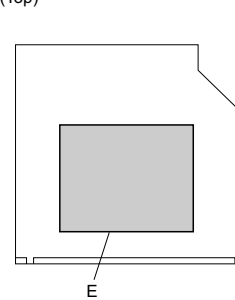
[ MBX-114 Board ]  
(Side B)



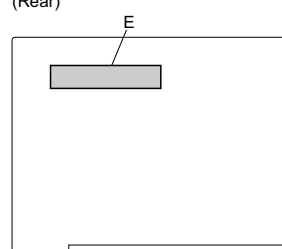
△[MA]  
[ LCD 15-inch XGA (High Brightness) (QDI) ]  
(Rear)



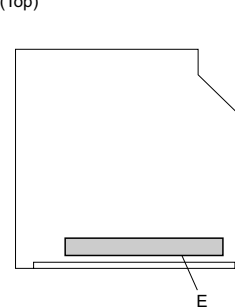
△[MA]  
[ W-DVD Drive (Made by Pi) ]  
(Top)



△[MA]  
[ LCD 15-inch XGA (AU) ]  
(Rear)



△[MA]  
[ Combo Drive (Made by QSI) ]  
(Top)



- A : Part No.
- B : Serial No.
- C : Revision No.
- D : Product Code
- E : Maker Barcode
- F : Global User ID (iLink)
- G : Mac Address
- [Hatched Box] : Barcode

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VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)



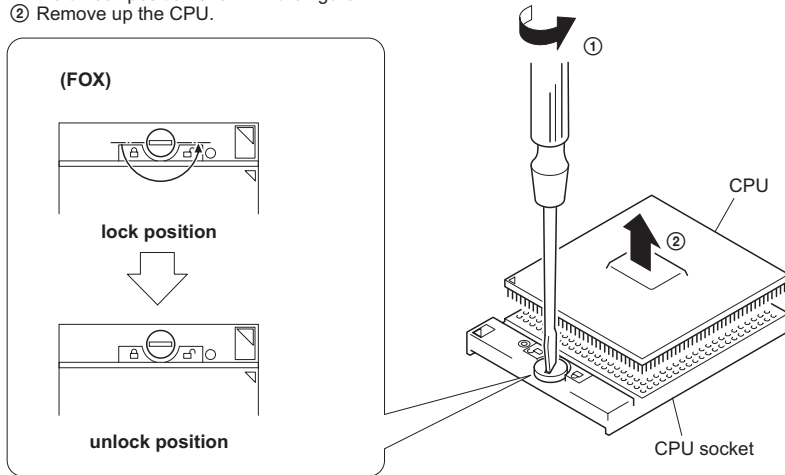
## 5-2. Replacing the CPU

Note: We have two kinds of CPU for this set, and either of them is used.  
Two kinds of CPU have differences in the lock position and the unlock position.

### 1. Socket configuration 1

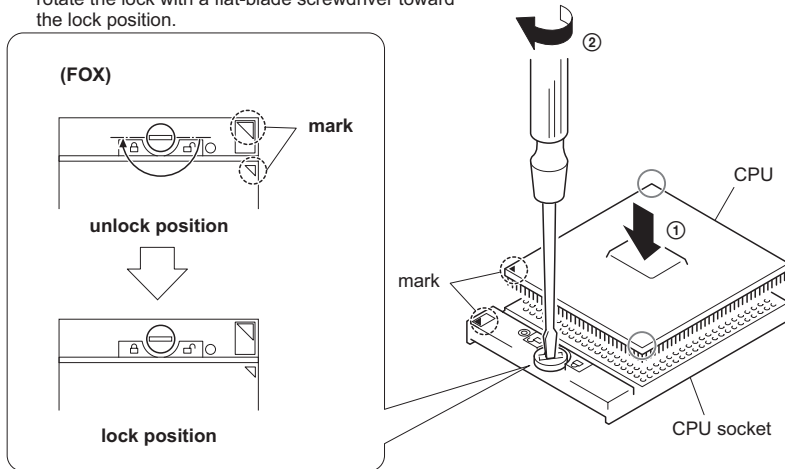
#### 1. How to remove the CPU

- ① Rotate the lock with a flat-blade screwdriver toward the unlock position shown in the figure.
- ② Remove up the CPU.



#### 2. How to install the CPU

- ① Position the mark on the CPU to the mark on the CPU socket and put in all pins to the holes on the CPU socket.
- ② Pressing two corners marked with ○ in the figure, rotate the lock with a flat-blade screwdriver toward the lock position.

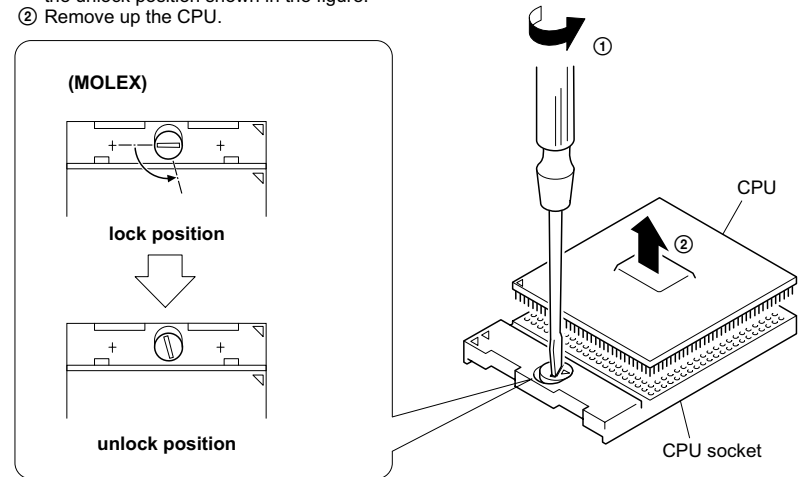


Note: Lock the CPU properly, or operation becomes unstable.

### 2. Socket configuration 2

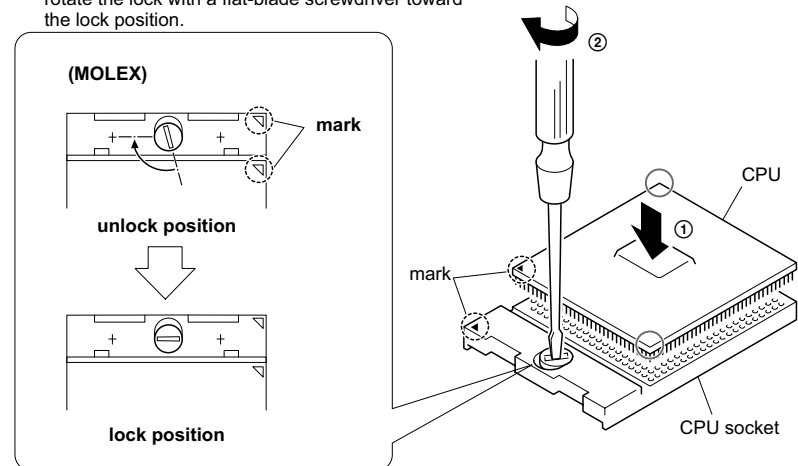
#### 1. How to remove the CPU

- ① Rotate the lock with a flat-blade screwdriver toward the unlock position shown in the figure.
- ② Remove up the CPU.



#### 2. How to install the CPU

- ① Position the mark on the CPU to the mark on the CPU socket and put in all pins to the holes on the CPU socket.
- ② Pressing two corners marked with ○ in the figure, rotate the lock with a flat-blade screwdriver toward the lock position.



Note: Lock the CPU properly, or operation becomes unstable.

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VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)



VGN-K30/K30B/K50B/K70B (J)  
PCG-K20P/K24FP (AM)  
PCG-K215B/K295HP (EU)  
PCG-K74/K74S/K76P/K76SP (AO)

## List of K Series (PCG & VGN) (As of June, 2005)

Service Manual Part No.	Model Name			
	J	AM	EU	AO
9-876-365-XX		PCG-K12FP PCG-K12P PCG-K13 PCG-K13F PCG-K13Q PCG-K14 PCG-K15 PCG-K15F PCG-K17	PCG-K115B PCG-K115M PCG-K115S PCG-K115Z PCG-K195BP PCG-K195HP	PCG-K64 PCG-K64S PCG-K66P PCG-K66SP
9-876-371-XX	VGN-K30 VGN-K30B VGN-K50B VGN-K70B	PCG-K20P PCG-K24FP	PCG-K215B PCG-K295HP	PCG-K74 PCG-K74S PCG-K76P PCG-K76SP

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# Revision History

Suffix	Ver.	Date	Contents	QM No.
-01	Ver. 1	2004.05.13	First Edition	
-02	Ver. 2	2004.05.28	△ <sub>1</sub> Front Page (Model Lineup), Page 1-1, Page 4-1, Page 4-3 to 4-5, Page 4-7, Page 4-10 to 4-11, Page 4-16, Back Cover	N2004_058AK
-03	Ver. 3	2004.06.21	△ <sub>2</sub> Front Page (Model Lineup), Page 1-1, Page 4-1, Page 4-3 to 4-5, Page 4-7, Page 4-12 to 4-14, Page 5-1, Back Cover	N2004_063AK
-04	Ver. 4	2004.07.12	△ <sub>3</sub> Front Page (Model Lineup), Page 1-1, Page 4-1, Page 4-3 to 4-7, Page 4-12 to 4-16, Page 5-1, Back Cover	N2004_073AK
-05	Ver. 5	2004.07.15	△ <sub>4</sub> Page 4-17	N2004_082CK
-06	Ver. 6	2004.08.09	△ <sub>5</sub> Front Page (Model Lineup), Page 1-1, Page 4-1, Page 4-3 to 4-7, Page 4-12 to Page 4-13, Page 4-15 to 4-17, Back Cover	N2004_092AK
-07	Ver. 7	2004.10.25	△ <sub>6</sub> Page 1-1, Page 4-8, Page 4-9	N2004_125CK
-08	Ver. 8	2005.06.03	△ <sub>7</sub> Page 4-4, Page 4-5	N2005_020CK
<Remarks>				